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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,310	09/12/2003	Jon C. Marine	MAT 3D9A	7828
23581	7590	10/20/2004	EXAMINER	
KOLISCH HARTWELL, P.C. 520 S.W. YAMHILL STREET SUITE 200 PORTLAND, OR 97204			ABDELWAHED, ALI F	
			ART UNIT	PAPER NUMBER
			3722	

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/661,310	MARINE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ali Abdelwahed	3722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 14 June 2004.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-51 is/are pending in the application.  
 4a) Of the above claim(s) 16-33 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-15 and 34-51 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/28/04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Objections***

Claims 37 and 51 are objected to because of the following informalities:

It is suggested that in:

Claim 37, line 2, after "...cam recess..." insert --region--.

Claim 51, line 3, after "...recess..." insert --region--.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 14, 15, and 49-51 are rejected under 35 U.S.C. 102(a) as being anticipated by PCT- WO 01/49383 A1 to Chung.

Chung discloses, with regards to claims 14 and 15, twin inter-engaged, motion coupled, substantially parallel axis rotors (56, 58) operatively mounted for juxtaposed relative intermittent rotation (see figs. 3A, 3B, and pgs. 5, 6), each rotor including: a toothed region (65A, and toothed region of rotor 56 can best be seen in fig. 3B) which lies along an arc that is less than a full circle (see figs. 3A, 3B); and a cam region (65B, and cam region of rotor 56 can best be seen in fig. 3B, which is opposite it's toothed region) including a portion of which lies substantially outside that arc toothed region

(see figs. 3A, 3B), the rotors being operatively positioned relative to one another in a manner which enables two different characters of inter-engaged relative rotating motion (see pgs. 5 and 6, lines 30-37 and 1-7, respectively), one of the characters involving tooth-region to tooth-region driving inter-engagement, wherein the two rotors counter rotate relative to one another, with one rotor driving the other rotor, and the other character involving sliding surface to sliding surface, non-driving inter-engagement, wherein the one rotor rotates and the other rotor is stationary (see figs. 3A, 3B, and respective portions of the specification), the first character of inter-engaged relative rotation motion occurring at a predefined sweep of angular relation between the twin rotors and the second character of inter-engaged relative rotation motion occurring at two predefined angular relations between the twin rotors positioned on either side of the sweep that defines the first character of inter-engaged relative rotation (see figs. 2A-3C, and respective portions of the specification); the toothed regions include portions extending across a common plane which is spaced from and generally normal to the axes (see figs. 3A, 3B).

Regarding claims 1 and 49-51, a drive gear (56) adapted to receive rotational input (receives rotational input from the second motor, which is not shown in the figures), the drive gear having a drive cam structure (defined by the arcuate upstanding wall best seen in fig. 3B) and a set of drive teeth (defined by the teeth opposite upstanding wall best seen in fig. 3B), the drive cam structure including a cam recess region (defined by the area recessed from the outer edge of the drive gear 56 that intersects with the defined drive cam structure) that includes a bearing surface (the

outer arcuate surface of the defined drive cam structure); and a driven gear (58) having a driven cam structure (65) and a set of driven teeth (65A), the driven cam structure including a cam lobe portion (65B) that includes a bearing surface configured to engage the cam recess bearing surface upon engagement of the drive teeth and the driven teeth (see fig. 3B); wherein the driven gear and the drive gear are operatively associated for selective transmission of the rotational input; wherein the driven gear has an engaged orientation, in which the drive teeth engage the driven teeth to cause the driven gear to counter rotate relative to the drive gear, and further wherein the driven gear has at least two non-rotating orientations, in which the drive cam structure and the driven cam structure are adapted to prevent the driven gear from rotating (see pgs. 5 and 6, lines 30-37 and 1-7, respectively); wherein the cam recess bearing surface is adjacent the drive teeth, and the cam lobe bearing surface is adjacent the driven teeth (see fig. 3B); wherein the cam recess region includes alignment guide surfaces adapted to guide the cam lobe bearing surface into the cam recess and align the drive teeth and the driven teeth for engagement (see figs. 3A, 3B).

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double

patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-15, 35-47, and 49-51 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-36 of U.S. Patent No. 6,623,327 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed subject matter of the present application is fully disclosed in the specification of U.S. Patent No. 6,623,327 B2 and is covered by the claims of U.S. Patent No. 6,623,327 B2. The claims of U.S. Patent No. 6,623,327 B2 are inclusive for they are drafted using the "comprising-type" format and cover the claimed subject matter of the present application.

Claims 14, 15, 34, and 48 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-37 of U.S. Patent No. 6,547,632 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed subject matter of the present application is fully disclosed in the specification of U.S. Patent No. 6,547,632 B2 and is covered by the claims of U.S. Patent No. 6,547,632 B2. The claims of U.S. Patent No. 6,547,632 B2 are inclusive for they are drafted using the "comprising-type" format and cover the claimed subject matter of the present application.

***Response to Arguments***

Applicant's arguments with respect to claims 14, 15, and 34 have been considered but are moot in view of the new ground(s) of rejection.

***Terminal Disclaimer***

The terminal disclaimers filed on June 14, 2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent Nos. 6,623,327 B2 and 6,547,632 B2 has been reviewed and is NOT accepted.

The person who signed the terminal disclaimer is not recognized as an officer of the assignee, and he/she has not been established as being authorized to act on behalf of the assignee. See MPEP § 324.

An attorney or agent, not of record, is not authorized to sign a terminal disclaimer in the capacity as an attorney or agent acting in a representative capacity as provided by 37 CFR 1.34 (a). See 37 CFR 1.321(b) and/or (c).

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Abdelwahed whose telephone number is (703) 305-3311. The examiner can normally be reached Monday through Friday from 10:00 A.M. to 6:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on (703) 308-2159.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

AA  
10/12/2004

  
A. L. WELLINGTON  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700